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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
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	ANTONELLI, TERRY, STOUT & KRAUS, LLP			CHEVALIER, ROBERT		
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ARLINGTON, VA. 22209-9889			2616			

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applicatio	n No.	Applicant(s)				
Office Action Summary		09/623,56	)	FUJITA ET AL.				
		Examiner		Art Unit				
		Bob Chev		2616				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHO THE N - Exten after: - If the - If NO - Failur Any r	ORTENED STATUTORY PERIOD FOR MAILING DATE OF THIS COMMUNICA isions of time may be available under the provisions of 3 SIX (6) MONTHS from the mailing date of this communic period for reply specified above is less than thirty (30) of period for reply is specified above, the maximum statutore to reply within the set or extended period for reply will, eply received by the Office later than three months after and patent term adjustment. See 37 CFR 1.704(b).	ATION. 7 CFR 1.136(a). In no eve cation. ays, a reply within the statu ory period will apply and will by statute. cause the appli	nt, however, may a reply be tir tory minimum of thirty (30) day expire SIX (6) MONTHS from cation to become ABANDONE	nely filed  s will be considered time the mailing date of this o	ily. communication.			
Status								
1)[	1)⊠ Responsive to communication(s) filed on <u>01 November 2000</u> .							
2a) <u></u> ☐	This action is <b>FINAL</b> . 2b)		on-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
<ul> <li>4)  Claim(s) 1-50 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-11,13-15,18-29,31-37,39 and 42-50 is/are rejected.</li> <li>7)  Claim(s) 12,16,17,30,38,40 and 41 is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>								
Applicati	on Papers							
10)⊠	The specification is objected to by the E The drawing(s) filed on <u>01 November 2</u> Applicant may not request that any objection Replacement drawing sheet(s) including the The oath or declaration is objected to be	$000$ is/are: a) $\square$ acon to the drawing(s) be correction is require	e held in abeyance. Se ed if the drawing(s) is ob	e 37 CFR 1.85(a). ejected to. See 37 C	CFR 1.121(d).			
Priority under 35 U.S.C. § 119								
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.								
2) Notice 3) Information	et(s)  te of References Cited (PTO-892)  te of Draftsperson's Patent Drawing Review (PTC)  mation Disclosure Statement(s) (PTO-1449 or PT)  tr No(s)/Mail Date 11/1/00.		4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal D 6) Other:	ate ·	°C-152)			

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## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-9, 13, 18-21, 33, are rejected under 35 U.S.C. 102(b) as being anticipated by Sata et al.

Sata et al discloses a video recording/reproducing that shows all the limitations recited in claims 1, and 19, including the feature of the input means for inputting a first signal (See Sata et al's Figure 4, component 1), the feature of the first recorder/reproducer means for recording/reproducing the first signal on and from a first recording medium (See Sata et al's Figure 4, components 3-5, and 30-32), the feature of the second recorder/reproducer means for recording/reproducing the first signal reproduced from the first recorder/reproducer means (See Sata et al's Figure 4, component 8), and the feature of the controlling means controlling the processing of signals (See Sata et al's Figure 4, components 102, and 106), and the feature of controlling the second recorder/reproducer to delay the first signal and to start recording the first signal from a third time ahead of the second time as specified in the present claims 1, and 19, would have been inherently present in the Sata et al's apparatus. Because, it is noted, as disclosed in Sata et al, that the first and the second recorder/reproducer provided thereof are independently controlled. Therefore, the user can always start the recording for the second recorder/reproducer at any desired time,

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thereby, the user can introduce the delay time or starting the recording ahead of said second time as claimed.

With regard to claims 2, 20, the feature of making a certain process on a second signal during the interval from the first time to a third time as recited thereof is present in Sata et al. (See Sata et al's Figure 4, component 106).

With regard to claims 3, and 21, the feature of the amount of information the first and/or second recorder/reproducer means can record or reproduce per unit time is larger than that of said first signal fed to the input means per unit time as specified thereof would be present in the cited reference of Sata et al. Because, Sata et al discloses that the inputted signal is compressed before recording the same on the recording medium. Therefore, the recording density is increased. (See Sata et al's Figure 4, component 102d).

With regard to claims 4-5, 18, and 33, the feature of the compressor compressing the first signal as specified in claim 4 is present in Sata et al (See Sata et al's Figure 4, component 102d); and further, the feature of the control means controlling the second recorder/reproducer means to end recording the first signal at a fourth time so that a second time interval from the third time to said fourth time can be reduced relative to a first time interval from said first time to said second time as specified in the present claim 4, and the feature of performing recording a plurality of times into which the time interval is divided as specified in claims 5, 18, and 33, would be inherently present in the cited reference of Sata et al. Because, it is noted, as disclosed in Sata et al, that the first and the second recorder/reproducer provided thereof are independently controlled.

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Therefore, the user can always start or end the recording operation for the second recorder/reproducer at any desired time, thereby, increase or reduce the second time interval as needed.

With regard to claim 6, the feature of the second recording medium being a tape recording medium as specified thereof is present in Sata et al. (See Sata et al's Figure 4, component 8).

With regard to claim 7, the feature of the first recording medium being disk recording medium as specified thereof is present in Sata et al. (See Sata et al's Figure 4, component 4).

With regard to claim 8, the feature of the first recording medium being a semiconductor memory as specified thereof is present in Sata et al. (See Sata et al's Figure 4, component 31).

With regard to claim 9, the feature of the first recorder/reproducer means makes access to a certain amount of signal in a shorter access time than the second recorder/reproducer means as specified thereof is present in Sata et al. Since, the first recorder/reproducer means disclosed in Sata et al is a random access memory. (See Sata et al's Figure 4, components 4, 31).

With regard to claim 13, the feature of making a certain process for another signal, as said second signal different from said first signal, that said second recorder/reproducer records or reproduces as specified thereof is present in Sata et al.

Since, the signal reproduced by the first recorder is different from the signal recorded by

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said first recorder in the sense that the signal recorded is compressed and the signal reproduced is decompressed. (See Sata et al's Figure 4).

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 5. Claims 10-11, 14-15, 28-29, 31, are rejected under 35 U.S.C. 103(a) as being unpatentable over Sata et al in view of Official Notice.

Sata et al discloses a video recorder/reproducer apparatus that shows substantially the same limitations recited in claims 10, 15, 28, including the feature of the first signal being a broadcast program as specified in the present claims 10, 15, 28. (See Sata et al's Figure 4, component 1).

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Sata et al fails to specifically disclose the feature of the signal processor means making a certain process for discriminating commercials included in the broadcast program from the program itself and recording the video signal without the commercials as specified in the present claims 10, 15, 28.

Examiner takes Official Notice in that it is notoriously well known in the video recording/reproducing art to have a processor means which includes the capability of discriminating commercials included in the broadcast program from the program itself reproduced from a recording medium for the purpose of removing the commercials and recording the video signal without the commercials.

It would have been obvious to one skilled in the art to modify the Sata et al's recording/reproducing apparatus wherein the processing means provided thereof (See Sata et al's Figure 4, component 106) would incorporate the capability of discriminating commercials included in the broadcast program from the program itself reproduced from a recording medium for the purpose of removing the commercials and recording the video signal without the commercial in the same conventional manner as is notoriously well known in the video recording/reproducing art. Examiner has taken Official Notice. The motivation is to prevent commercial recording, thereby increase the recording density of the recording medium as suggested in the prior art.

With regard to claims 11, 29, the feature of the first signal being compressed and the processor means expands the compressed signal as specified thereof would be present in the proposed combination of Sata et al and Official Notice indicated above. (See Sata et al's Figure 4, components 102d, and 106b).

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With regard to claims 14, 31, the feature of the broadcast program information including the video and the audio information as specified is present in Sata et al. (See Sata et al's column 4, lines 66-68).

6. Claims 22-24, 34-37, 42-50, are rejected under 35 U.S.C. 103(a) as being unpatentable over Sata et al in view of Haines.

Sata et al discloses a video recording/reproducing apparatus that shows substantially the same limitations recited in claims 22, 34, including the feature of another recorder/reproducer means to record and reproduce on and from a recording medium the signal reproduced from a first recorder/reproducer means. (See Sata et al's Figure 4).

Sata et al's reference fails to specifically disclose the feature of the another recorder/reproducer means for recording and reproducing the signal on and from the recording medium in the same time interval (simultaneously) as specified in the present claims 22, 34.

Haines discloses a video recording/reproducing apparatus which includes the feature of a recording/reproducing means for recording and reproducing the signal on and from the recording medium in the same time interval (simultaneously) as specified in the present claims 22, 34. (See Haines'claim 6).

It would have been obvious to one skilled in the art to modify the Sata et al's video recording/reproducing apparatus wherein the recorder/reproducer means provided thereof (See Sata et al's Figure 4, component 8) would incorporate the capability of recording and reproducing the signal on and from the recording medium in

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the same time interval (simultaneously) in the same conventional manner as is shown by Haines. The motivation is to allow playback of the recorded video signal without interrupting the recording operation, thereby increase the efficiency of the apparatus as suggested by Haines.

With regard to claim 23, the feature of performing recording or reproducing a plurality of times into which the time interval is divided as specified in claim 23, would be inherently present in the proposed combination of Sata et al and Haines indicated above. Because, it is noted, as disclosed in Sata et al, that the first and the second recorder/reproducer provided thereof are independently controlled. Therefore, the user can always start or end the recording or the reproduction operation for the second recorder/reproducer at any desired time, thereby, increase or reduce the second time interval as needed.

With regard to claim 24, it is noted that the proposed combination of Sata et al and Haines indicated above does disclose a video recording/reproducing apparatus that shows substantially the same limitations recited in the present claim 24, including the feature of recording the inputted video signal on a recording/reproducing means and reproducing the recorded signal from said recording/reproducing means and supplying the same to another recording/reproducing means as specified in the present claim 24. (See the plurality of recording/reproducing means shown in Sata et al's Figure 4).

The proposed combination of Sata et al and Haines indicated above fails to specifically disclose the feature of said recording/reproducing means as being a tape recording medium as claimed in claim 24.

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Haines does disclose a video recording/reproducing apparatus wherein an inputted video signal is supplied to a tape recording medium for recording purposes as claimed in claim 24.

It would have been obvious to one skilled in the art to modify the proposed combination of Sata et al and Haines indicated above wherein the recording means provided thereof (See Sata et al's Figure 4, components 3-5, and 30-32) would be replaced by the tape recording means for the purpose of recording/reproducing the inputted video signals in the same conventional manner as shown by Haines. The motivation is to increase the recording density as suggested in the prior art.

With regard to claim 35, the feature of performing simultaneously both recording and reproducing operations on and from both the recorder/reproducer units, and further, the feature of supplying the reproduced signal from the second recorder/reproducer to the first recorder/reproducer as specified in the present claim 35 are present in the proposed combination of Sata et al and Haines indicated in the above rejection of claims 22-23. (See the capability of supplying the signal reproduced from the VTR 8 to the first recording/reproducing means as shown by Sata et al's Figure 4, components 3-5, 30-32, and further, see Sata et al's column 5, lines 3-7).

With regard to claim 36, the feature of the speed of an input/output being different between the two recorder/reproducer means as specified thereof would be present in the proposed combination of Sata et al and Haines indicated above.

Because, Sata et al discloses two different type of recording/reproducing means. One being a disk type recording/reproducing means wherein compressed data are recorded

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and reproduced and the other one being a conventional tape type recording/reproducing means.

With regard to claim 37, it is noted that all the limitations recited thereof are present in the proposed combination of Sata et al and Haines indicated above, including the feature of the compressing means for compressing the inputted video/audio signals (See Sata et al's Figure 4, component 102d), the feature of expanding the compressed data (See Sata et al's Figure 4, component 106), the feature of the fifth recording/reproducing means for recording and reproducing the compressed data (See Sata et al's Figure 4, components 3-5, and 30-32), the feature of the sixth recording/reproducing means for recording and reproducing the compressed data (See the VTR 8 which includes the capability of recording the reproduced compressed data provided thereof via the expansion means 106), and the feature of the selector means for switching between signals reproduced from the two recording/reproducing means and the compressed data as specified thereof would have been inherently present in the proposed combination of Sata et al and Haines. Because, Sata et al would include a control system for the purpose of controlling the switching of which output video signal can be provided to the input T1, wherein such output video signal can be outputted from television 7, or VTR 8. Since, Sata et al already discloses that T1 includes the capability of designating a terminal to which the video signal is fed from, such as the VTR8. (See Sata et al's column 5, lines 3-7, and Figure 4), and furthermore, the feature of recorded the compressed data on the fifth recording medium while the sixth recording medium is reproduced as specified thereof is also present in the proposed combination of Sata et

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al and Haines indicated above. (See the capability of performing recording and reproducing operation at the same time on both the recording means as indicated in the proposed combination of Sata et al and Haines indicated above).

With regard to claim 42, the feature of reproducing data from the fifth recording medium and at the same time transmitting the data reproduced from the fifth recoding medium to the sixth recording medium, thus recorded thereon, wherein the past video signals are reproduced from the fifth recording medium, the signals are reproduced from the sixth recording medium as specified thereof would be inherently present in the proposed combination of Sata et al and Haines indicated above. Because, said proposed combination of Sata et al and Haines would include the capability of performing recording and reproducing operations at the same time (or simultaneously) on both the recording/reproducing means provided thereof.

With regard to claims 43-45, the feature of the generated time code signal being recorded on said recording media and the feature of controlling the reproduction positions of said recording media from which data are reproduced based on the recorded time code signal as specified thereof would have been inherently present in the proposed combination Sata et al and Haines indicated above. Because, conventional recording/reproducing apparatus such as the one disclosed in Sata et al and Haines would necessarily have recorded on the recording media provided thereof time code information for the same purpose of controlling reproduction positions of said recording media from which data are to be reproduced.

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With regard to claims 46-47, the feature of the fifth or sixth recording medium being a magnetic tape, magnetic disk, magnetooptical disk, phase change optical disk or semiconductor memory as specified thereof is present in the proposed combination of Sata et al and Haines indicated above. (See Sata et al's Figure 4, components 3-5, 30-32, and 8).

With regard to claim 48, the feature of the recording capacity of the fifth recording medium being different from that of the sixth recording medium as specified thereof is present in the proposed combination of Sata et al and Haines indicated above. (See Sata et al's Figure 4, components 3-5, 30-32, and 8).

With regard to claim 49-50, the feature of the compressed data generator means and the expanded data generator means being based on MPEG system as specified thereof is present in the proposed combination of Sata et al and Haines indicated above. (See Sata et al's Figure 4, components 102d, and 106).

7. Claims 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sata et al and Haines as applied to claim 24 above, and further in view of Official Notice.

The proposed combination of Sata et al and Haines indicated in the above rejection of claim 24 does disclose a video recording/reproducing apparatus that shows substantially the same limitations recited in the present claims 25-27, including the feature of recording the inputted video signal on a recording/reproducing means and reproducing the recorded signal from said recording/reproducing means and supplying

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the same to another recording/reproducing means as specified in the present claims 25-27. (See the plurality of recording/reproducing means shown in Sata et al's Figure 4).

The proposed combination of Sata et al and Haines as indicated in the above rejection of claim 24 fails to specifically disclose the feature of said another recording/reproducing means as being a disk-type or semiconductor recording medium as claimed in claims 25 or 26-27.

Examiner takes Official Notice in that it is notoriously well known in the video recording/reproducing art to have a video recording/reproducing apparatus wherein an inputted video signal is supplied to a disk-type or semiconductor recording medium for recording purposes as claimed in claims 25 or 26-27.

It would have been obvious to one skilled in the art to modify the proposed combination of Sata et al and Haines indicated in the above rejection of claim 24, wherein said another recording/reproducing means provided thereof (See Sata et al's Figure 4, component 8) would be replaced by a disk-type or a semiconductor recording means for the purpose of recording/reproducing the inputted video signals in the same conventional manner as is well known in the video recording/reproducing art. Examiner has taken Official Notice. The motivation is to increase the accessing speed of said another recording/reproducing means as suggested in the prior art.

8. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sata et al and Official Notice as applied to claim 28 above, and further in view of Haines.

The proposed combination of Sata et al and Official Notice as indicated in the above rejection of claim 28 does disclose a video recording/reproducing apparatus that

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shows substantially the same limitations recited in claim 32, including the feature of removing commercials from a video signal provided to a signal processor as specified in the present claim 32. (See the above rejection of claim 28).

The proposed combination of Sata et al and Official Notice indicated in the above rejection of claim 28 fails to specifically disclose the feature of the fourth recorder/reproducer means which includes the capability of reproduce a signal while a signal processor removes commercials from a video signal provided for recording.

Haines discloses a video recording/reproducing apparatus which includes the feature of a recording/reproducing means which includes the capability of reproduce a signal while a video signal is provided for recoding as indicated in the claimed invention. (See Haines'claim 6).

It would have been obvious to one skilled in the art to modify the proposed combination of Sata et al and Official Notice video recording/reproducing apparatus wherein the recorder/reproducer means provided thereof (See Sata et al's Figure 4, component 8) would incorporate the capability of recording and reproducing the signal on and from the recording medium at the same time in the same conventional manner as is shown by Haines. The motivation is to allow playback of the recorded video signal without interrupting the recording operation, thereby increase the efficiency of the apparatus as suggested by Haines

It is further to be noted, therefore, that the claimed feature of reproducing the recorded video information from the fourth recording/reproducing means while removing the commercials by the signal processor means that discriminates the commercials as

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specified in the present claim 32 would have been inherently present in the proposed combination of Sata et al, the Official Notice, and Haines indicated above. Because, said another recording/reproducing means shown by said proposed combination would include the capability of performing recording and reproducing at the same time. Therefore, commercials would have been removed from the video signals provided for recording in said another recording/reproducing means while reproduction could have been performed at the same time.

9. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sata et al and Haines as applied to claim 37 above, and further in view of Freeman et al.

The proposed combination of Sata et al and Haines indicated in the above rejection of claim 37 discloses a video recording/reproducing apparatus that shows substantially the same limitations recited in claim 39, including the feature of receiving broadcast video signals, compressing said video signals and recording the same on a recording/reproducing means as specified in the present claim 39. (See the above rejection of claim 39).

The proposed combination of Sata et al and Haines indicated in the above rejection of claim 37 fails to specifically disclose the feature of receiving a plurality of television broadcasts at a time, multi-compressing means for compressing each of the received signals and recording each of the compressed data obtained in the multi-recorder means as specified in the present claim 39.

Freeman et al discloses a recording apparatus which includes the feature of receiving a plurality of video signals at a time, multi-compressing means for

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compressing each of the received signals and recording each of the compressed video data obtained in a multi-recorder means as specified in the present claim 39. (See Freeman et al's claim 30).

It would have been obvious to one skilled in the art to modify the proposed combination of Sata et al and Haines indicated in the above rejection of claim 37, wherein the receiving and compressing means provided thereof (See Sata et al's Figure 4) would incorporate the capability of receiving a plurality of video signals at a time, multi-compressing means for compressing each of the received signals and recording each of the compressed video data obtained in a multi-recorder means in the same conventional manner as shown by Freeman et al. The motivation is to be able to record video signals from more than one channel at a time at any desired time as suggested by Freeman et al.

10. Claims 12, 16-17, 30, 38, 40-41, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bob Chevalier whose telephone number is 703-305-4780. The examiner can normally be reached on MM-F (9:00-6:30), second Monday off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's Acting Supervisor, Thai Tran can be reached on 703-305-4725. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

B. Chevalier September 29, 2004.

ROBERT CHEVALIER PRIMARY EXAMINER